Application No.: Amendment Dated: 10/625,154

November 12, 2004

Reply to Office Action of: August 25, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

second electrode,

115. (Cancelled).
16. (Currently Amended) A switch according to claim 6, wherein A switch for switching
over a signal propagation path by contacting or non-contacting a movable member to or
from an electrode, the switch comprising:
an input port for inputting a signal;
a movable member connected to the input port;
a first electrode for propagating the signal;
a first control power supply connected to the first electrode and for generating a first
control signal;
a second electrode for blocking off the signal; and
a second control power supply connected to the second electrode and for generating
a second control signal;
the first control power supply provides said first control signal to the first electrode,
the movable member being displaced by a driving force generated based on a potential
difference between the movable member and first electrode and a potential difference
between the movable member and second electrode, thereby being contacted to the first or

the movable member is vibrated in a state contacted on the first electrode or the second electrode,

the <u>first or second</u> control signal is controlled to apply to the movable member a force in one direction corresponding to a magnitude of an overshot that the movable member displaces beyond a predetermined position.

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17. (Currently Amended) switch according to claim 14, wherein A switch for switching over a signal propagation path by contacting or non-contacting a movable member to or from an electrode, the switch comprising:

from an electrode, the switch comprising:
an input port for inputting a signal;
a movable member connected to the input port;
a first electrode for propagating the signal;
a first control power supply connected to the first electrode and for generating a first
control signal;
a second electrode for blocking off the signal; and
a second control power supply connected to the second electrode and for generating
a second control signal;
the first control power supply provides said first control signal to the first electrode,
the movable member being displaced by a driving force generated based on a potential
difference between the movable member and first electrode and a potential difference
between the movable member and second electrode, thereby being contacted to the first or
second electrode,

the first and second control signal from the first and second control power supply, respectively, apply to the movable member a force in a pulse form in a time shorter than a response time of the movable member,

the pulse-formed force has an application time that is a half in length of an application time of a pulse-formed force causing the movable member to overshoot to a position at which is to occur pull-in for the movable member to be abruptly contacted to the electrode, under an optimal condition of a magnitude of an overshoot of the movable member and the response time.

- 18. (Original) A switch according to claim 17, wherein the optimal condition is that the overshoot is in a magnitude of substantially 0.1 μm or smaller and the response time is substantially 20 μs or shorter.
- 19. (Currently Amended) A switch according to claim 1, wherein the <u>first or second</u> control signal is provided such that a force in a direction opposite to a direction of an

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overshoot and corresponding to a magnitude of the overshoot is alternately applied to the movable member at all times.

20. (Original) A switch according to claim 19, wherein the force in a direction opposite to a direction of an overshoot and corresponding a magnitude of the overshoot is asymmetric with respect to a direction.

21.-26. (Cancelled).

- 27. (New) A switch according to claim 16, wherein the first and second control signal from the first and second control power supply, respectively, apply to the movable member a force in a pulse form in a time shorter than a response time of the movable member.
- 28. (New) A switch according to claim 16, wherein the movable member and the electrode has a contact interface in a waveform or rectangular form.
- 29. (New) A switch according to claim 17, wherein the movable member and the electrode has a contact interface in a waveform or rectangular form.
- 30. (New) A switch according to claim 18, wherein the movable member and the electrode has a contact interface in a waveform or rectangular form.
- 31. (New) A switch according to claim 19, wherein the movable member and the electrode has a contact interface in a waveform or rectangular form.
- 32. (New) A switch according to claim 20, wherein the movable member and the electrode has a contact interface in a waveform or rectangular form.